

REMARKS

Favorable reconsideration of this application, in light of the following discussion and in view of the present amendment, is respectfully requested.

Claim 28 is added. Claims 1-9 and 28 are pending in the application.

I. Rejection under 35 U.S.C. §112

In the Office Action, at page 2, claim 5 was rejected under 35 U.S.C. §112, 2nd paragraph as being indefinite and having an element lacking antecedent basis.

Claim 5 has been amended in view of the Examiner's comments with regard to indefiniteness.

With regard to the lack of antecedent basis, Applicants respectfully submit that the recitation of "an intermediate member" does not lack antecedent basis as the element was introduced for the first time in the claim and was introduced as "an intermediate member" instead of "said intermediate member." Accordingly, withdrawal of the §112 rejections is respectfully requested.

II. Rejection under 35 U.S.C. § 102

In the Office Action, at page 2, claims 1-9 were rejected under 35 U.S.C. § 102(e) as being unpatentable over U.S. Patent No. 6,384,473 B1 to Peterson et al. This rejection is respectfully traversed because Peterson does not discuss or suggest that "said electronic component and wiring patterns of said lid are electrically connected at a bonded part of said substrate and said lid," as recited in independent claim 1.

As a non-limiting example, the present invention as set forth, for example, in claim 1 is directed to an electronic device including a micromachine component and an electronic component. An operating space for the micromachine component is defined by a substrate and a lid bonded thereto. The electronic component and the wiring patterns of the lid are electrically connected at the bonded part of the substrate and the lid, using ultrasonic bonding.

Peterson discusses a microelectronic device package with a window. The package includes plates having an electrically conductive metallized trace disposed on the surface for conducting an electrical signal between an interior and exterior location. A microelectronic device is disposed within the assembly. Peterson does not, however, discuss or suggest that the device package includes an electronic component and wiring patterns of the lid that are

electrically connected at a bonded part of a substrate and a lid. Peterson merely discusses that the “cover lid 42 is attached to surface 32 of plate 30” (col. 7, lines 42-43). Peterson does not discuss or suggest that a substrate is bonded to the lid and the electronic component and wiring patterns of the lid are connected at the bonded part of the substrate and lid. In Peterson, the lid is attached to the plate and “[t]his attachment can comprises a second seal 48 disposed in-between surface 18 and surface 34.” However, if the bonded part between the lid and the substrate is taken to be seal 50, Peterson does not suggest that an electronic component and the lid wiring patterns are electrically connected at the bonded part. While Peterson does discuss that “surface 18 can comprise a bond pad 44 electrically connected to metallized trace 24 at interior interconnect location 12” (col. 7, lines 14-16), Peterson does not discuss or suggest that the wiring patterns of the lid are electrically connected to the electronic component at the bonded part between the substrate and the lid.

In addition, it is unclear from the Examiner’s assertion that reference numbers 48 and 50 of Peterson correspond to the substrate and lid, respectively, and that Fig. 5 (82) corresponds to the electronic component and wiring patterns of the lid. Peterson merely shows the cover lid sealed to a first plate, the first plate sealed to a second plate, and the second plate sealed to a window providing optical access to a microelectronic device disposed within the entire assembly. The metallized trace on one of the plates in Peterson does not electrically connect with wiring patterns of the lid at the bonded part of the lid and the substrate on which the metallized trace is formed.

Therefore, as Peterson does not discuss or suggest that “an operating space for said micromachine component is defined by said substrate and a lid bonded covering an active surface of said substrate,” and does not discuss or suggest that “said electronic component and wiring patterns of said lid are electrically connected at a bonded part of said substrate and said lid,” as recited in independent claim 1, claim 1 patentably distinguishes over the reference relied upon. Accordingly, withdrawal of the § 102(e) rejection is respectfully requested.

Claims 2-9 depend either directly or indirectly on independent claim 1 and include all the features of claim 1, plus additional features that are not discussed or suggested by the reference relied upon. For example, claim 2 recites that “the bonded part is an ultrasonic bonded part of said substrate and said lid.” Therefore, claims 2-9 patentably distinguish over the reference relied upon for at least the reasons noted above. Accordingly, withdrawal of the § 102(e) rejection is respectfully requested.

III. New Claims

New claim 28 recites that the features of the present invention include "a lid and a substrate bonded without interruption at an outer periphery of the lid and the substrate and defining a space in which the micromachine component is mounted, the electronic component being formed on the substrate; wherein wiring patterns of the lid are electrically connected to the electronic component at the bonded part of the lid and substrate." Nothing in the reference relied upon discusses or suggests such. It is therefore submitted that claim 28 patentably distinguishes over the reference relied upon.

Conclusion

In accordance with the foregoing, claim 5 has been amended. Claims 10-27 were previously cancelled. Claim 28 is added. Claims 1-9 and 28 are pending and under consideration.

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

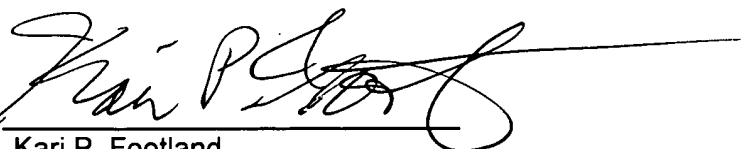
Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

STAAS & HALSEY LLP

Date: 5/10/06

By: 
Kari P. Footland
Registration No. 55,187

1201 New York Avenue, NW, 7th Floor
Washington, D.C. 20005
Telephone: (202) 434-1500
Facsimile: (202) 434-1501